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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

July 23, 1997

HAND DELIVERED

Mr. William F. Caton Office of the Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, D.C. 20554

RE: In the Matter of Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service, ET Docket No. 95-18.

Dear Mr. Caton:

Enclosed herewith is one (1) original, and five (5) copies of our reply comments to the Report and Order and Further Notice of Proposed Rulemaking in ET Docket 95-18.

Sincerely,

COMSEARCH

Christopher R. Hardy

Vice President, Microwave and Satellite

Enclosure

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Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

In the Matter of)	
)	
Amendment of Section 2.106 of the)	ET Docket No. 95-18
Commission's Rules to Allocate)	RM-7927
Spectrum at 2 GHz for Use by the)	PP-28
Mobile-Satellite Service	j	

To: The Commission

REPLY COMMENTS OF COMSEARCH

Comsearch respectfully submits its reply to the comments on the Further Notice of Proposed Rule Making (FNPRM) in the above captioned proceedings. In its initial comments, Comsearch discussed the viability of sharing between Broadcast Auxiliary Services (BAS) and Fixed Services (FS), with these reply comments we would like to further address this issue.

In the FNPRM the Commission requested comments on the potential for sharing between Broadcast Auxiliary Services (BAS) and Fixed Services in the 2110-2130 MHz band¹. As noted in their initial comments, Comsearch believes that with proper analysis and coordination this band could, in certain

¹ Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service, ET Docket No. 95-18, First Report and Order and Further Notice of Proposed Rulemaking, FCC 97-93 (Mar. 14, 1997).

areas of the country, be shared by fixed BAS facilities and incumbent FS facilities². Successful band sharing could be realized by allowing the BAS service to use the 2110-2130 for fixed-links only. As further noted in our initial comments, the amount of fixed-link relays used by the BAS needs to be examined. California Oregon Broadcasting Inc (COBi) in their comments state that in certain "small and medium sized markets" fixed-link BAS relays are commonly used³. With proper engineering analysis it may be possible that in those regions certain fixed BAS relays, currently using BAS channels A1 and A2 (1990-2025 MHZ), could use the 2110-2130 MHZ spectrum without causing unacceptable interference into incumbent Fixed Services.

Also in their comments COBi "urges the Commission to allow BAS licensees to employ the band 2130-2150 MHz in such cases where the BAS licensee can demonstrate that such usage would not cause unacceptable interference to any incumbent FS operations⁴." COBi further states "[a]s the Commission recognizes, BAS service is highly localized and directional in nature, thus allowing for a high degree of flexibility in fashioning interference avoidance schemes⁵." Comsearch agrees that two highly directional services such as fixed BAS and FS could share spectrum even in the case where the BAS channel bandwidths are significantly greater than the FS links.

 $^{^{\}rm 2}$ Comsearch Comments, ET Docket No. 95-18, at 2-4 (June 23, 1997).

³ California Oregon Broadcasting, Inc. Comments, ET Docket 95-18, at 2 (June 23, 1997).

⁴ COBi Comments at 6.

⁵ COBi Comments at 6.

Exhibit A is an overlay of COBi's fixed BAS relays currently using the 1990-2025 MHz band

superimposed on an overlay of the existing 2110-2130 (2160-2180) MHz links. While certain FS

facilities may not be able to share the spectrum with the identified BAS links, the majority of FS links

will not receive harmful interference. An interference analysis between three of the BAS links and

the surrounding FS microwave systems was performed. The results indicate that for each of the three

links there were only 2 to 3 cases of unacceptable interference where either equipment upgrades to

FS facilities or relocation would be required. In effect these three links could share the spectrum with

the incumbent FS with minimal relocation requirements. More detailed and comprehensive studies

are required.

In conclusion, Comsearch believes that sharing between BAS and FS facilities may be possible in the

2110 - 2130 MHZ band by initially limiting BAS use of this band to fixed operations and

implementing Part 101 interference analysis and coordination procedures between the two services.

Respectfully Submitted,

COMSEARCH

Prepared by:

Christopher R. Hardy

Vice President, Microwave and Satellite Services

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Sample Channel A1 and A2 System vs. Incumbent 2110 - 2130 MHz Common Carrier Systems



System owned by California Oregon Broadcasting, Inc.